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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/615,613	07/14/2000	Jeong-Ho Cha	992093	4625

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EXAMINER

ZHONG, CHAD

ART UNIT	PAPER NUMBER
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2154

DATE MAILED: 01/16/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/615,613

Applicant(s)

CHA, JEONG-HO

Examiner

Chad Zhong

Art Unit

2154

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 November 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☒ The proposed drawing correction filed on 24 November 2003 is: a) ☐ approved b) ☒ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

FINAL ACTION

1. This action is responsive to communications: Amendment, filed on 11/24/2003. This action has been made final.
2. Claims 1-14 are presented for examination. In amendment A, filed on 11/24/2003: claims 1-14 are amended.
3. It is noted that although the present application does contain line numbers in specification and claims, the line numbers in the claims do not correspond to the preferred format. The preferred format is to number each line of every claim, with each claim beginning with line 1. For ease of reference by both the Examiner and Applicant all future correspondence should include the recommended line numbering.
4. The drawings is objected to because figures 1 and 2 should be designated by a legend such as --Prior Art-- only that which is old is illustrated. See MPEP § 608.02(g). A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance. Applicant's amendment changed Figures 3 and 4, changes should be made to Figures 1 and 2 instead.

Claim Rejections - 35 USC § 112

5. Claims 4-7, 14 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
 - a. The claim language in the following claims is murky or not clearly understood:
 - i. As per claim 4, lines 5-6, it is not clearly understood from where does the

transmitting a new program data and a first control signal to the first node; line 11, it is not clearly understood what is meant by “and to”, appropriate correction is required;

ii. As per claim 6, line 6, it is not clearly understood whether “a command signal” refers to “a command signal” in claim 4, line 11 (i.e. if they are the same, the word such as “said” or “the” must be used).

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over applicant's prior art (hereinafter AAPA) in view of Nishio et al. (hereinafter Nishio) US 5,557,317.

8. As per claim 1, AAPA teaches the invention substantially as claimed including a program-changing method for a network comprising at least two nodes that each have a program, said at least two nodes comprising a first predetermined node and a second predetermined node, said network further comprising a network management system (NMS) coupled to the first predetermined node, the method comprising the steps of (specification pg 3-5, figures 1-2):

a. transmitting a new program data and a first control signal to said first predetermined node coupled to the network management system (NMS) disposed in the network separately from the nodes and configured to manage the changing of the programs of the nodes (specification pg 3-5, figures 1-2);

b. replacing the program of said first predetermined node with the new program data

responsive to the control signal (specification pg 3, lines 7-13);

c. transmitting by the network management system (NMS), a second control signal to said second predetermined node (specification pg 3, line 13); and

9. AAPA does not teach (b) allocating a fixed region in a memory within said first predetermined node in response to the reception of the new program data, storing the received new program data in the allocated fixed region. However it would have been obvious to one of ordinary skill in this art at the time of invention to include memory in each node for storing the received data because doing so would improve the integrity of AAPA's system by storing the received data and forwarding the data when needed.

10. AAPA does not teach (c) causing the network management system (NMS) to transmit to said first predetermined node a data-transmitting signal for transmitting the stored new program data to said second predetermined node.

11. Nishio teaches (c) causing the network management system (NMS) to transmit to said first predetermined node a data-transmitting signal for transmitting the stored new program data to said second predetermined node (Col. 1, lines 51-57).

12. It would have been obvious to one of ordinary skill in this art at the time of invention was made to combine the teaching of AAPA and Nishio because they both dealing with updating neighbor nodes of new data. Furthermore, the teaching of Nishio to allow the network management system (NMS) to transmit to said first predetermined node a data-transmitting signal for transmitting the stored new program data to said second predetermined node would improve the efficiency for AAPA's system by allowing less hops in between nodes.

13. AAPA does not teach (d) in response to the data-transmitting signal, causing said first predetermined node to transmit the stored new program data thereof to said second predetermined

node.

14. Nishio teaches (d) in response to the data-transmitting signal, causing said first predetermined node to transmit the stored new program data thereof to said second predetermined node (Col. 1, lines 51-57).

15. As per claim 2, AAPA teaches the method as set forth in Claim 1, wherein the method further comprising the step of (e) replacing the program of the said second predetermined node with the new program data responsive to the second control signal (specification pg 3, lines 13-14).

16. AAPA does not teach new program data is received from said first predetermined node.

17. Nishio teaches new program data is received from said first predetermined node (Col. 1, lines 51-57).

18. It would have been obvious to one of ordinary skill in this art at the time of invention was made to combine the teaching of AAPA and Nishio because they both dealing with updating neighbor nodes of new data. Furthermore, the teaching of Nishio to allow the network management system (NMS) to transmit to said first predetermined node a data-transmitting signal for transmitting the stored new program data to said second predetermined node would improve the efficiency for AAPA's system by allowing less hops in between nodes.

19. As per claim 3, AAPA teaches the method set forth in Claim 2, wherein said nodes are arranged in a straight line or loop (specification pg 2, lines 12-13; pg 4, lines 8-11; figure 1).

20. As per claim 12, AAPA teaches the method of claim 1, wherein said second control signal is identical to said first control signal (specification pg 3-5).

21. As per claim 13, AAPA teaches the method of claim 1, wherein the programs of each of

the nodes are identical (specification pg 3-5).

22. As per claim 4, AAPA teaches a program-changing method for a network comprising a plurality of nodes including a first node and a second node, each of the first and second nodes having a program, the method comprising the steps of:

- a. transmitting a new program data and a first control signal to the first node, said first node being coupled to a network management system (NMS) located in the network remotely from the plural nodes (specification pg 3, lines 8-11);

- b. changing the program of said first node to said new program data under the control of said control signal (specification pg 3, lines 10-13);

- d. transmitting a second control signal to said second node (specification pg 3, line 13); and,

- e. upon receiving said stored new program data, changing the program of said second node to said new program data under the control of said second signal (specification pg 3, lines 13-14).

23. AAPA does not teach (c) storing said new program data in a memory means of said first node. However it would have been obvious to one of ordinary skill in this art at the time of invention to include memory in each node for storing the received data because doing so would improve the integrity of AAPA's system by storing the received data and forwarding the data when needed.

24. AAPA does not teach (d) transmitting, by said NMS to said first node, a command signal to transmit the stored new program data to the second node.

25. Nishio teaches (d) transmitting, by said NMS to said first node, a command signal to transmit the stored new program data to the second node (Col. 1, lines 51-57).

26. It would have been obvious to one of ordinary skill in this art at the time of invention was made to combine the teaching of AAPA and Nishio because they both dealing with updating

neighbor nodes of new data. Furthermore, the teaching of Nishio to allow the network management system (NMS) to transmit to said first predetermined node a command signal to transmit the stored new program data to said second node would improve the efficiency for AAPA's system by allowing less hops in between nodes.

27. AAPA does not teach (e) the program received at said second node originated from said first node.

28. Nishio teaches (e) the program received at said second node originated from said first node (Col. 1, lines 51-56).

29. It would have been obvious to one of ordinary skill in this art at the time of invention was made to combine the teaching of AAPA and Nishio because they both dealing with updating neighbor nodes of new data. Furthermore, the teaching of Nishio to allow the program received at said second node originated initially from said first node would improve the efficiency for AAPA's system by allowing less hops in between nodes.

30. As per claim 5, AAPA teaches the method set forth in Claim 4, wherein said nodes are arranged in a straight line or loop (specification pg 2, lines 12-13; pg 4, lines 8-11; figure 1).

31. As per claim 6, AAPA teaches the method as set forth in Claim 4, wherein the plural nodes further include a remaining node, said method further comprising the steps of:

- g. transmitting said second control signal to said remaining node (specification pg 3, lines 15-16);

- h. upon receiving new program data, changing the program of said remaining node to said new program data under the control of said second control signal (specification pg 3, lines 15-16).

32. AAPA does not teach

f. storing said new program data received from said first node in a memory means of said second node (Col. 1, lines 51-57);

g. transmitting, by said NMS, a command signal to said second node to transmit said stored new program data in said second node to sad remaining node (Col. 1, lines 51-57; Col. 3, lines 54-56).

33. It would have been obvious to one of ordinary skill in this art at the time of invention was made to combine the teaching of AAPA and Nishio because they both dealing with updating neighbor nodes of new data. Furthermore, the teaching of Nishio to store said new program data received from said first node in a memory means of said second node and transmitting, by said NMS, a command signal to said second node to transmit said stored new program data in said second node to sad remaining node would improve the efficiency for AAPA's system by allowing less hops in between nodes.

34. As per claim 7, Claim 7 is rejected for the same reason as the rejection to claims 4 and 6 above.

35. As per claim 14, Claim 14 is rejected for the same reason as the rejection to claim 7 above.

36. As per claim 8, Claim 8 is rejected for the same reason as the rejection to claim 4 above.

37. As per claim 9, Claim 9 is rejected for the same reason as the rejection to claim 7 above.

38. As per claim 10, Claim 10 is rejected for the same reason as the rejection to claim 8 above.

39. As per claim 11, Claim 11 is rejected for the same reason as the rejection to claim 5 above.

Conclusion

40. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The following patents and publications are cited to further show the state of the art with respect to "Method for Changing Program of Remote Node in Network".

- i. US 6,081,530 Wiher et al.
- ii. US 6,157,650 Okuyama et al.
- iii. US 5,339,307 Curtis

Applicant's remarks filed 11/24/03 have been considered but are moot in view at the new grounds at rejection necessitated by Applicant's amendment. **THIS ACTION IS MADE FINAL.** Applicant is reined of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chad Zhong whose telephone number is (703) 305-0718. The examiner can normally be reached on M-F 7am-4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John A Follansbee can be reached on 703-305-8498. The fax phone numbers for the

organization where this application or proceeding is assigned are 703-746-7239 for regular communications and 703-746-7238 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.

CZ
January 9, 2004


JOHN FOLLANSBEE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100